

City of Perris Annual Water Quality 2015 Consumer Confidence Report

ABOUT THIS REPORT

The City of Perris is proud to provide its 2015 Water Quality Report, which contains valuable information about the quality of its drinking water and the efforts made to continue providing the highest quality water to the community it serves. **In 2015, The City of Perris drinking water met all drinking water health standards of the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board).**

Contact Information.

For any questions regarding this report please contact:
Daryl Hartwill, Assistant Director of Public Works
951-657-3280

The City of Perris encourages public participation in decisions that may affect the quality of the water supply. The City Council meets every second Tuesday and the last Tuesday of each month. Questions for the City Council can be presented to the City Administrative Department. Call (951) 943-6100.

Este informe contiene informacion importante con respecto a su calidad del agua. Si usted desea obtener informacion en espanol, visitenos en www.cityofperris.org o llame (951) 956-2120.

The USEPA, the State Board and the California Public Utilities Commission (CPUC) are the agencies responsible for establishing drinking water quality standards. The drinking water delivered to your homes and businesses meets standards established by all three agencies. The City of Perris uses independent, state-certified water quality laboratories for testing. In some cases, the City goes beyond what is required to monitor for constituents that have known health risks. Unregulated contaminant monitoring helps USEPA determine where certain contaminants occur and whether it needs to regulate those contaminants.

This year's report, which contains water quality and supply information for 2015 complies with the regulations of the 1996 Safe Drinking Water Act reauthorization that charges USEPA with updating and strengthening the tap water regulatory program.

SOURCES OF WATER SUPPLY

Water supplied to The City of Perris comes from both ground and surface water, and is supplied by the Eastern Municipal Water District (EMWD).

The 2015 Consumer Confidence Report for EMWD water supplied to the City of Perris can be obtained by calling (951) 928-3777 ext 6337 or at www.emwd.org

The blended water quality and any contaminant levels found to be present are also listed in this report for contaminants which are of the most health risk.

In general, sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

- Radioactive contaminants that can be naturally occurring or the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, USEPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

WATER QUALITY MONITORING

The City of Perris routinely monitors for contaminants in its drinking water in accordance with Federal and State laws. To minimize the presence of harmful bacteria or other pathogens, the City of Perris is also required to continuously monitor the disinfection levels in the water system. The disinfection levels of the water system are checked daily to ensure the quality of the water. Bacteria, which may indicate potential health risks, are monitored weekly. Over 150 bacteria tests were conducted during 2015, with NO exceeded limits found. During 2015, there were NO violations of any Federal or State water quality standards.

Results of monitoring for the period of January 1 to December 31, 2015, are identified in the tables located on the following pages. These tables contain chemicals and constituents that have primary MCLs. The following definitions are provided for terms and abbreviations contained in the tables that might be unfamiliar.

DEFINITIONS AND MEASUREMENTS

- **AL = Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **MCL = Maximum Contaminant Level:** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.
- **MCLG = Maximum Contaminant Level Goal:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by USEPA.
- **MRDL = Maximum Residual Disinfection Level:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants
- **MRDLG = Maximum Residual Disinfection Level Goal:** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by USEPA. MRDLGs do not

reflect the benefits of the use of disinfectants to control microbial contaminants.

- **N/A = Not Applicable:** Monitoring requirements may vary between sources.
- **ND = Not Detected:** Laboratory analysis indicates that the constituent is not present at detectable levels.
- **NM = Not Monitored:** The source was not monitored for the constituent.
- **NS = No Standard:** No existing federal or state drinking water standard has been established.
- **NTU = Nephelometric Turbidity Units**
- **PDWS = Primary Drinking Water Standard:** MCLs or MRDLs for contaminants that affect health, along with their monitoring and reporting requirements and water treatment requirements.
 - **PHG** = Public Health Goal- The level of a contaminant in drinking water below which there is no known or expected health risk PHGs are set by the California Environmental Protection Agency.

pCi/L = picocuries per liter (a measure of radioactivity)

ppb = parts per billion, or micrograms per liter ($\mu\text{g}/\text{L}$)

ppm = parts per million, or milligrams per liter (mg/L)

ppq = parts per quadrillion, or picograms per liter

ppt = parts per trillion, or nanograms per liter

RAA = running annual average

LRAA = locational running annual average

TT = Treatment Technique

Additional Information Fluoride

All drinking water naturally contains some fluoride.

Community water fluoridation is the process of adjusting the naturally occurring fluoride level to the optimum level for preventing tooth decay. Fluoride levels in drinking water are limited under California state regulations at a maximum level of 2.0 parts per million (ppm).

The City of Perris receives its water from the Eastern Municipal Water District. EMWD adds Fluoride levels to the water that are below the regulation limit and are within the optimal range of 0.7 to 0.8 ppm.

WATER QUALITY TABLES

The first column of each water quality table that follows lists the chemical/constituent detected in the water. The next columns list the average concentration and range of concentrations of the detected chemical. All chemicals and constituents were monitored from either the EMWD Supply or from the City of Perris water distribution system during 2015.

Also listed is the PHG (or MCLG, if applicable) established for each chemical/constituent. The last two columns describe the likely source(s) of each contaminant detected in the drinking water and any health effects.

Contact Information

If you have specific questions about the quality of the drinking water supplied to you, please contact:

Daryl Hartwill, Assistant Director of Public Works

951-657-3280

Primary Standards – Mandatory Health Related Standards – Regulated Contaminants
Table 1.

Microbiological Contaminants				Major Sources in Drinking Water	Health Effects Language
Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	EMWD Supply Highest # of positive samples		
Total Coliform Bacteria (number of positive samples in any one month)	No more than 1 positive sample in a month	(0)	0	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present.
Fecal Coliform and E.coli (number of positive samples during the year)	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E.coli positive	(0)	0	Human and animal fecal waste	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproducts Precursors

Chemical or Constituent (reporting units)	MCL (AL) [MRDL]	PHG (MCLG) [MRDLG]	EMWD Supply Range	Highest LRAA	City of Perris System Range	Highest LRAA	Major Sources in Drinking Water	Health Effects Language
Total Trihalomethanes (TTHMs) (ppb)	80	N/A	12-30	23	10.2- 28.6	26.3	By-product of drinking water chlorination	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney or central nervous system problems, and may have an increased risk of getting cancer.
Haloacetic Acids (HAA5s) (ppb)	60	N/A	4.4-8.3	6.2	0.0-11.1	8.8	By-product of drinking water chlorination	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Total Chlorine Residual (ppm)	[MRDL] [4 as Cl2]	[MRDLG] [4 as Cl2]	1.1-3.0	2.4	0.70- 1.85	1.27	Drinking water disinfectant added for treatment	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Bromate (ppb)	10	(0)	2.2-12	4.5	NM	NM	By-product of drinking water disinfection	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.

Inorganic Chemicals

Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	EMWD Supply Range	Average	City of Perris System Range	Average	Major Sources in Drinking Water	Health Effects Language
Aluminum (ppb)	1000	600	64-180	115	NM	NM	Erosion of natural deposits; residue from some surface water treatment processes	Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestinal tract effects.
Barium (ppm)	1	2	ND	ND	NM	NM	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.
Fluoride (ppm) Treatment Related	2	1	0.6-0.9	0.8	0.3-0.9	0.7	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL of 2 mg/L may get mottled teeth.
Nitrate (ppm)as N	10	45 As NO3	ND-0.9	0.5	NM	NM	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

Radiologicals									
Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	EMWD Supply Range	City of Perris System Average	Major Sources in Drinking Water	Health Effects Language			
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND-4	ND	NM	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.		
Gross Beta Particle Activity (pCi/L)	50	(0)	ND	ND	NM	Decay of natural and man-made deposits	Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.		
Uranium (pCi/L)	20	0.43	ND-4	2	NM	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer		

Table 2. Lead and Copper (Testing is completed at Customers Taps)							
Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	EMWD Supply 90 th Percentile	City of Perris System 90 th Percentile	Major Sources in Drinking Water # of samples >AL	Health Effects Language	
Lead (ppb)	AL= 15	2	N/A	N/A	ND	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppb)	AL=1300	300	N/A	N/A	390	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Table 3. Regulated Contaminants with Secondary MCLs and Other Parameters

Chemical or Constituent (reporting units)	MCL (Secondary MCL)	PHG (MCLG)	EMWD Supply	City of Perris System		Major Sources in Drinking Water	Health Effects Language
			Range	Average	Range	Average	
Sodium (ppm)	NA	NA	77-82	80	NM	N/A	There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.
Hardness (ppm)	NA	NA	102-124	113	NM	N/A	N/A
Color (units)	(15)	NA	1-2	1	<1	Naturally occurring organic materials	N/A
Odor Threshold (units)	(3)	NA	<1	<1	1	Naturally occurring organic materials	N/A
Turbidity (NTU)	(5)	NA	ND	ND	0.1-0.8	0.1	Soil Runoff Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
Total Dissolved Solids (ppm)	(1,000)	NA	335-364	350	NM	NM	Runoff/leaching from natural deposits N/A
Chloride (ppm)	(500)	NA	76-96	86	NM	NM	Runoff/leaching from natural deposits; seawater influence N/A
Sulfate (ppm)	(500)	NA	81-84	83	NM	NM	Runoff/leaching from natural deposits; Industrial wastes N/A
Other Inorganics							
Hexavalent Chromium ug/l	10	1	ND	ND	NM	N/A	By Product of chrome plating industrial activity
State Regulated Contaminants with no MCL							
Boron (ppb)	NL = 1,000	NL=1,000	ND - 170	170	NM	NM	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.